

**Notice of Allowability**

Application No.

09/929,221

Applicant(s)

GASS ET AL.

Examiner

Art Unit

Ghassem Alie

3724

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 03/21/07.
2. ☒ The allowed claim(s) is/are 1-6, 9, 10, 12-14, 16, 17 and 19-24.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date 09/16/02
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

1. This is a response to the Appeal Brief filed on 03/21/07. Claims 7, 8, 11, 15 and 18 were cancelled, claims 1-6, 9, 12-14, 16, 17 and 19-24 have been allowed. Claim 10 is the only claim that has been rejected in the Final Action mailed on 10/23/06.

***Reasons for Allowance***

2. The following is an examiner's statement of reasons for allowance: The claims are allowable because prior art fails to teach a capacitive coupling includes at least a portion of the shaft or the arbor as one conductive plates and the second conductive plate spaced apart from the shaft so that there is a gap between the cutting tool and the second conductive plate as set forth in claims 1, 10, and 17. The prior art also fails to teach the contact detection system includes a first electrode capacitively coupled to the cutting tool to impart a signal to the cutting tool and a second electrode capacitively coupled to the cutting tool to monitor the signal imparted to the cutting tool, as set forth in 12.

Regarding claims 1, 10, 12 and 17, Friemann et al. ((3,858,095) teaches a woodworking machine including a electrically conductive cutting tool mounted on a rotatable electrically conductive shaft or arbor. Friemann also teaches a contact detection system configured to detect contact between a person and the cutting tool. Friemann also teaches a reaction system configured to case one or more predetermined actions to take place upon detection of contact between a person and the cutting tool by the contact detection system. However, Friemann fails to teach a capacitive coupling includes at least a portion of the shaft or the arbor as one conductive plate and the second conductive plate spaced apart from the shaft so that there is a gap between the cutting tool and the second conductive plate as set forth in claims 1, 10, and 17. Friemann also fails to teach the contact detection system

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includes a first electrode capacitively coupled to the cutting tool to impart a signal to the cutting tool and a second electrode capacitively coupled to the cutting tool to monitor the signal imparted to the cutting tool, as set forth in 12.

Regarding claim 10, Terauchi (4,512,224) teaches a woodworking machine including a motor, an electrically isolated arbor configured to be driven by the motor, where the arbor has an outer surface. Terauchi also teaches a circular saw coupled to the arbor, and excitation system adapted to generate an electrical signal. However, Terauchi fails to teach a capacitive coupling includes two spaced-apart conductors and where at least a portion of the outer surface of the arbor is one of the conductors, as set forth in claim 10.

None of these references by themselves or in combination with the other prior art cited teach the claimed invention set forth in claims 1, 10, 12 and 17.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Voigtlaeder (2005/0145081 A1) teach a woodworking machine with a contact detection system.

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4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ghassem Alie whose telephone number is (571) 272-4501.


The examiner can normally be reached on Mon-Fri 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, SEE <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GA/ga

May 11, 2007

  
BOYER D. ASHLEY  
SUPERVISORY PATENT EXAMINER